CLAIMS:

1. An electrophoretic display panel for subsequently displaying pictures comprising

- a plurality of picture elements, each picture element comprising two electrodes for receiving a potential difference and charged particles being able to occupy positions between the electrodes, and
- drive means being able to supply to each picture element a picture pulse, each picture pulse being a sequence of potential difference pulses and comprising
- a response-increasing pulse for increasing the ability of the particles to respond to the potential difference without substantially changing the position of the particles, and
- a drive pulse for bringing the particles into one of the positions for displaying the respective picture,

characterized in that,

with respect to at least a number of the picture elements, for each picture element out of said number

- the display panel further comprises averaging means for providing information with respect to an accumulation of charge in the picture element, which accumulation of charge is a result from picture pulses preceding the response-increasing pulse, and
- the drive means are further arranged to select, based on the information, a time average of the response-increasing pulse to reduce an undesired charge accumulation in the picture element.

2. A display panel as claimed in claim 1 characterized in that

- the response-increasing pulse has a response-increasing value and an associated response-increasing duration, the product of which represents a response-increasing energy,
- the drive pulse has a drive value and an associated drive duration, the product of which represents a drive energy,

- the averaging means are able to receive data representative of the response-increasing energy and the drive energy of the picture pulses preceding said response-increasing pulse, and provide a running total thereof, and
- the drive means are further arranged to select the time average of the response-increasing pulse such that the magnitude of said running total is reduced.

3. A display panel as claimed in claim 2 characterized in that
- the averaging means are able to receive data representative of the response-increasing energy and the drive energy of the last picture pulse from the picture pulses preceding said response-increasing pulse, the running total being equal to the sum of the response-increasing energy and the drive energy of the last picture pulse, and
- the drive means are further arranged to select
  - a sign of the time average of the response-increasing pulse to be opposite to a sign of the running total, and
  - the magnitude of the product of the response-increasing duration and the time average of the response-increasing pulse to be smaller or equal to the magnitude of the running total.

4. A display panel as claimed in claim 3 characterized in that the magnitude of the product of the response-increasing duration and the time average of the response-increasing pulse is substantially equal to the magnitude of the running total.

5). A display panel as claimed in claim 2 characterized in that the response-increasing pulse is the sum of an AC part, having an associated time average being substantially zero, and a DC part.

6. A display panel as claimed in claim 5 characterized in that the DC part is equal to a constant.

7. A display panel as claimed in claim 5 characterized in that a magnitude of the DC part is a decreasing function of time.

8. A display panel as claimed in claim 7 characterized in that the function is substantially linear.

9. A display panel as claimed in claim 5, 6, 7 or 8 characterized in that the AC part is a periodic function of time having a constant amplitude.

10. A display panel as claimed in claim 5, 6, 7, 8 or 9 characterized in that the AC part is a periodic function of time having a stepwise in time decreasing amplitude.

11. A display panel as claimed in claim 5, 6, 7, 8 characterized in that the AC part is a series of pairs of sub-AC pulses, the two members of each pair having potential difference values of opposite polarity and substantially equal durations, the durations of the pairs in the series being a stepwise decreasing function of the serial number of the pairs in the series.

12. A display panel as claimed in claim 1 characterized in that each picture element is one of the number of the picture elements.

13. A display device comprising the display panel as claimed in claim 1.